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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,585	03/01/2002	James R. Fore SR.	4287-013	3921
24112	7590	11/07/2003	EXAMINER	
COATS & BENNETT, PLLC P O BOX 5 RALEIGH, NC 27602			LANGDON, EVAN H	
			ART UNIT	PAPER NUMBER
			3654	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,585

Applicant(s)

FORE ET AL.

Examiner

Evan H Langdon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☒ Claim(s) 38-41 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters “566”, and “568” have been used to designate both a fixed control roller and a moveable control roller in Figures 8A and 8B, and in the specification page 18, lines 7-26 and page 19, lines 1-24. The reference characters “566” and “568” are opposite in the Figures 8A and 8B, as well as inconsistent in the specification in the areas specified above. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application.

The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

Page 9, line 11, “remote data terminal 406” and page 26, line 23, “indicator light 406.”

Page 12, line 13, “housing302” replace with --housing 302--.

Page 16, line 4, “traverse arm or device 518” and page 17, line 17, “wire directional control device 518.”

Page 17, line 6, “servo motor 516” needs to noted as --not shown--.

Page 18, line 23, “Figure 8,” should be --Figure 8B--.

Page 29, line 4, “water,” should be --wire--.

Page 31, line 13 and 16, “encounter,” should be --encoder--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claim 22-32 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: structure on how the wire is driven in the first direction.

Claims 31, 32 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "aggressive" on line 1 of the respective claims renders the claims indefinite. For the purposes of examination 'aggressive' will be interpreted as 'engaging.'

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Pietroni (US 3,980,244).

Pietroni shows a wire winding machine comprising:

a pair of rotatably driven spaced apart mandrels 2a, 2b;

a traverse 24 for guiding wire onto each one of the pair of mandrels, one at a time;

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the traverse being moveable between first and second positions such that in the first position the traverse acts to guide wire onto one of the mandrels and guides wire on the second mandrel when in the second position; and

where the traverse 24 is movable along an arcuate path, as seen by the solid and dashed lines of Figure 1.

In regards to claim 2, Pietroni shows the traverse swings about an axis 21.

In regards to claim 3, Pietroni shows a frame structure 22, 24, 28 where the axis 21 extends transversely across the frame structure of the winding machine.

In regards to claim 4, Pietroni shows a double acting fluid cylinder 52 for swinging the traverse between first and second positions.

In regards to claim 5, Pietroni shows a frame 22, 24, 28 mounted on a shaft 21, the traverse 24 being mounted to the frame and moveable therewith.

In regards to claim 6, Pietroni shows a fluid cylinder 52 operatively connected to the frame for moving the frame back and forth about the shaft 21.

In regards to claim 7, Pietroni shows the cylinder 52 connected between the frame structure 1 associated with the winding machine and the frame 22, 24, 28.

In regards to claim 8, Pietroni shows the frame includes a cradle 24, suspended from the shaft.

In regards to claim 9, Pietroni shows the frame includes a generally rectangular structure and a pair of swing arms 22, 28 that are rotatable journaled to the shaft 21.

In regards to claim 10, Pietroni shows a single transfer arm 23, 25 for transferring wire one mandrel to the next.

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In regards to claim 11, Pietroni shows a wire machine comprising:

- a pair of spaced apart mandrels 2a, 2b;
- a traverse 24 for guiding wire onto each of the pair of mandrels 2a, 2b, one at a time;
- a frame 22, 24, 28 having the traverse 24 mounted to it;
- the frame being moveably mounted for swinging movement about an axis 21; and
- an actuator 52 operatively connected to the frame for moving the frame back and forth

resulting in the traverse 24 moving in an arcuate path, as seen by the solid and dashed lines of Figure 1.

In regards to claim 12, Pietroni shows the frame moving on shaft 21.

In regards to claim 13, Pietroni shows the actuator as a double-acting fluid cylinder 52 connected to the frame 22, 24, 28 and the winding machine 1.

In regards to claims 14 and 15, Pietroni shows the frame includes a generally rectangular structure and a pair of swing arms 22, 28 that are rotatable journaled to the shaft 21.

In regards to claim 16, Pietroni shows the traverse 24 being cantilevered from the frame.

With respect to claims 17-21, the method described in these claims would inherently result from the use of wire winding machine of Pietroni as advanced above.

Claims 22-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Hurst (US 4,892,262).

Hurst shows a wire winding machine comprising:

- at least one mandrel 16 for winding;
- a traverse 34 for directing wire to the mandrel; and

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a wire directional control device as seen in Figure 7, for receiving wire being directed to the mandrel and engaging the wire in such manner that the wire can move through the device in one direction and is prevented from moving through the device in the opposite direction, as explained in column 5, on lines 20-38.

In regards to claim 23, Hurst shows the wire directional control device includes a pair of rollers 90, 94 that engage the wire and permit the wire to move between them.

In regards to claim 24, Hurst shows one control roller 94 movable with respect to the other roller 90.

In regards to claim 25, Hurst shows the roller 94 is mounted on pivot arm as noted on column 5, line 35.

In regards to claim 26, Hurst shows the roller 94 on the pivot arm allows for the wire to move freely between the rollers 90, 94 in one direction and biases the wire to prevent it from moving in the opposite direction.

In regards to claim 27, Hurst shows a pair of inlet idle rollers 64 and a pair of outlet idle rollers 58, 92, with the control rollers 90, 94 disposed between the two pairs of idle rollers.

In regards to claim 28, Hurst shows the roller 94 is mounted on pivot arm as noted on column 5, line 35, and roller 90 mounted on a fixed axis.

In regards to claim 29 and 30, Hurst shows the roller 94 is spring biased as noted on column 5, line 35.

In regards to claims 31 and 32, Hurst shows the rollers having an engaging surface.

In regards to claim 33, Hurst shows a wire winding machine comprising:

at least one rotatable mandrel 16;

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a traverse 34 for moving back and forth and guiding wire onto the mandrel;
a wire directional control device as seen in Figure 7, mounted on the traverse for receiving wire being fed to the mandrel, wire directional control device including;

a pair of rollers 90, 94 mounted adjacent each other including a fixed roller 90 and a movable roller 94 with the fixed roller mounted about a fixed axis and the movable roller mounted on a movable arm (column 5, line 35) and movable back and forth with respect to the fixed roller;

where a wire passing through the traverse is fed between the fixed roller 90 and the movable roller 94 and passes through as the wire is fed to the mandrel;
and

where the moveable roller 94 and the fixed roller 90 and oriented to allow the wire to pass in a first direction, but prevent the wire from moving back through the device in the opposite direction.

In regards to claim 34, Hurst shows the movable roller 94 biased towards the fixed roller 90.

In regards to claim 35, it is inherent that the pivotal arm having the movable roller is pivotally mounted.

In regards to claim 36, Hurst shows a pair of inlet idle rollers 64 and a pair of outlet idle rollers 58, 92, with the control rollers 90, 94 disposed between the two pairs of idle rollers.

In regards to claim 37, Hurst shows the rollers having an engaging surface.

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Allowable Subject Matter

Claims 38-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evan H Langdon whose telephone number is (703)-306-5768. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703)-308-2688. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

ehl


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